

REMARKS

I. General

Claims 1, 3, 5-29, 31-33, and 35-37 are pending in this application. Claims 20-29, 35, and 37 are allowed; claims 1, 3-19, and 31 are rejected; and claims 32, 33, and 36 are objected to. Claims 14 and 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite. Claims 1, 3-19, and 31 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 7,024,680 to Howard (hereinafter "Howard"). Claims 12, 14, 15, and 32 have been amended to correct informalities. Claim 1 has been amended to include limitations of claim 4 (now cancelled). Applicant hereby traverses the rejections of record and requests reconsideration and withdrawal of such in view of the remarks contained herein.

II. Improper Final Rejection

As an initial matter, Applicant points out that the rejection of record should not be final. In the Office Action mailed on June 22, 2006, the Examiner rejected claims 1, 3-19, and 31 under 35 U.S.C. 102(e). In doing so, the Examiner relied upon the filing date of Howard's provisional application to establish Howard as prior art under 35 U.S.C. 102(e). However, contrary to Examination Guidelines for 35 U.S.C. § 102(e), the Examiner relied upon the disclosure of Howard's issued patent (and cited to that document) instead of the document which is purported to be prior art, i.e., Howard's provisional application. Moreover, the Examiner did not provide Applicant a copy of Howard's provisional application, thereby allowing Applicant to determine whether the subject matter of Howard relied upon for rejecting the claims is supported in the provisional application. In a response dated September 22, 2006, Applicant requested that the Examiner provide Howard's provisional application to afford Applicant a full and fair opportunity to respond to the rejection of record, *see Response*, pg. 8 (noting that a patent issued from a provisional application would be accorded the prior application's filing date as its 102(e) prior art date if the prior application provides proper support for the relied upon subject matter). In the Final Action the Examiner provided Howard's provisional application for the first time. Nevertheless, the Examiner still cited to Howard's issued patent to support the rejection of record.

Applicant points out that the rejection of record is insufficient on two counts. First, despite providing Howard's provisional application, the Examiner has still not shown where the subject matter of Howard relied upon for rejecting the claims is supported in the provisional application. Instead, the Examiner merely points to portions of Howard's issued patent to satisfy the claim limitations. *See* Final Action, pgs. 3-7. Second, the Examiner has made the rejection of record final despite continuing to rely on the disclosure of Howard's issued patent and not on the provisional application. In any event, Applicant was not given an opportunity to appropriately respond to the Examiner's rejection until after a final action issued. This, of course, contradicts M.P.E.P guidelines. For the reasons set forth above, Applicant requests that the Examiner show how the rejection of record is supported in Howard's provisional application and remove finality of the rejection of record. In any event, in the interest of advancing prosecution of the pending application, Applicant endeavors to address the Examiner's rejections.

III. Rejections Under 35 U.S.C. 112(2)

Claims 14 and 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite. Specifically, the Examiner rejects claims 14 and 15 as "said desired RF transmission" does not have antecedent basis in the claims. Please note that claims 14 and 15 have been amended only for the purpose of correcting this informality. The claims, however, have not been amended in the face of prior art. No new matter has been added.

III. Rejections Under 35 U.S.C. 102(e)

Claims 1, 3-19, and 31 are rejected under 35 U.S.C. 102(e) as being anticipated by Howard.

It is well settled that to anticipate a claim, the reference must teach every element of the claim. *See* M.P.E.P. § 2131. Moreover, in order for a prior art reference to be anticipatory under 35 U.S.C. § 102 with respect to a claim, "[t]he elements must be arranged as required by the claim." *See* M.P.E.P. § 2131; *citing In re Bond*, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990). Furthermore, in order for a prior art reference to be anticipatory under 35 U.S.C. § 102, "[t]he identical invention must be shown in as complete detail as is contained in

the . . . claim.” See M.P.E.P. § 2131; citing *Richardson v. Suzuki Motor Co.*, 9 U.S.P.Q.2d 1913 (Fed. Cir. 1989).

Claim 1, as amended, recites “wherein said scheduling means includes means for shifting a time sequence of said RF data transfer to avoid said interference.” According to claim 1, the RF data transfer sequence is shifted during the actual RF data transfer interval. Embodiments of this are shown at, for example, Figs. 3 & 4. In the Final Action the Examiner points to Howard, at col. 13 lines 37-50, as satisfying this limitation. However, Howard, at both the Examiner’s citation and in the provisional application, merely discloses that a scheduler avoids interference “by not scheduling any upstream transmissions during intervals when interference is expected.” Initially, Applicant notes that merely not scheduling a transmission is not the same as shifting a time sequence of RF data transfer to avoid interference, as set forth in the claim. For instance, not scheduling a transmission involves not sending a transmission at all. According to Howard, in certain instances data merely may not be transferred at all due to interference. However, even if Howard could be construed as shifting a data transfer, Howard would presumably schedule the entire data transfer around interference such that its start time would be arranged after the expected interference. This necessity, of course, is avoided according to claim 1. As shown, Howard does not teach that a sequence of RF data is shifted to avoid interference. As such, Howard does not teach or suggest every limitation of claim 1. Therefore, Applicant requests withdrawal of the rejection of record.

Claims 3-11 and 31 depend from claim 1 and inherit every limitation therefrom. As shown, Howard does not teach every limitation of claim 1. As such, claims 3-11 and 31 set forth limitations not taught by Howard. Moreover, claims 3-11 and 31 set forth limitations making them patentable in their own right.

For example, claim 5 recites “wherein a modulation of said RF data transfer is changed to accommodate said time sequence shifting.” In the Final Action the Examiner points to Howard, at col. 13 lines 47-50, as satisfying this limitation. However, Howard merely discloses sending low priority transmissions during interference impulses and making those transmission more robust by using a lower modulation scheme or FEC. Applicant points out that merely applying a lower modulation scheme to increase robustness is not the

same as changing a modulation to accommodate time sequence shifting. That is, simply lowering a modulation scheme does not involve accommodating time sequence shifting. Therefore, Applicant requests withdrawal of the rejection of record.

Claim 6 recites “wherein a code rate of said RF data transfer is adjusted to accommodate said time sequence shifting.” In the Final Action the Examiner points to Howard, at col. 13 lines 47-50, as satisfying this limitation. However, Howard merely discloses sending low priority transmissions during interference impulses and making those transmission more robust by using a lower modulation scheme or FEC. Applicant points out that merely applying an FEC scheme to increase robustness is not the same as adjusting a code rate of RF data transfer to accommodate time sequence shifting. That is, simply changing FEC does not involve accommodating time sequence shifting. Therefore, Applicant requests withdrawal of the rejection of record.

Claim 10 recites “wherein said means for detecting is an antenna separate from antennas used to effect said RF data transfer.” The Examiner points to Howard’s Detector and classifier 220 as satisfying this limitation. However, Howard’s detector is part of a processing core and is implemented as a software module. *See* Howard at col. 6 lines 28-31 and Fig. 2. In view of such, Howard’s detector is clearly not an antenna as set forth in the claim. Moreover, Howard does not disclose antennas at all, much less an antenna separate from antenna used to effect RF data transfer. Instead, Howard, transfers RF signals via a coaxial network. *See id.* at col. 6 lines 4-6, Fig. 2. Therefore, Applicant requests withdrawal of the rejection of record.

Claim 12 recites “detecting interference using a filter” and “sweeping said filter across an RF band of interest.” In the Final Action the Examiner equates Howard’s RF Impairment Detector and Classifier (IDC) to the recited filter. In doing so, the Examiner points to Howard, at col. 6 lines 26-31 and col. 6 lines 59-67, as satisfying these limitations. *See* Final Action, pg. 5. However, Howard’s IDC is disclosed as merely comprising a software module that identifies RF impairment on an upstream channel. Howard’s IDC identifies impairments by, for example, examining FEC errors, FFT output data, time sample data, and SNR data. However, there is no mention that Howard’s IDC is a filter as set forth in the claims, or that Howard’s IDC is swept across an RF band of interest. As such, Howard

does not teach or suggest every limitation of claim 12. Therefore, Applicant requests withdrawal of the rejection of record.

Claims 13-19 depend from claim 12 and inherit every limitation therefrom. As shown, Howard does not teach every limitation of claim 12. As such, claims 13-19 set forth limitations not taught by Howard. Moreover, claims 13-19 set forth limitations making them patentable in their own right.

For example, claim 13 recites “wherein said filter is a narrow band filter.” The Examiner equates Howard’s RF Impairment Detector and Classifier (IDC) to the recited narrow band filter. In doing so, the Examiner points to Howard, at col. 6 lines 26-31 and col. 6 lines 59-67, as satisfying these limitations. *See* Final Action, pg. 5. However, Howard’s IDC is disclosed as merely comprising a software module that identifies RF impairment on an upstream channel. Howard’s IDC identifies impairments by, for example, examining FEC errors, FFT output data, time sample data, and SNR data. However, there is no mention that Howard’s IDC is a narrow band filter as set forth in the claims. Therefore, Applicant requests withdrawal of the rejection of record.

IV. Conclusion

In view of the remarks above, Applicant believes the pending application is in condition for allowance. Applicant believes no fee is due with this response. However, if a fee is due, please charge Deposit Account No. 06-2380, under Order No. 68144/P001US/10500783 from which the undersigned is authorized to draw.

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Respectfully submitted,

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